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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,569	11/26/2003	Wolfgang Beigang	GKNG 1184 PUS	9113

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EXAMINER

NGUYEN, XUAN LAN T

ART UNIT PAPER NUMBER

3683

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/723,569	<b>Applicant(s)</b> BEIGANG, WOLFGANG	
	<b>Examiner</b> Lan Nguyen	<b>Art Unit</b> 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 February 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13, 18-38 and 41-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 18-38 and 41-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoda (JP 2-221731) in view of Gallmeyer et al (USP 5,660,256).

Re: claim 1, Yokoda shows in figure 1, a vibration absorber for attaching to a rotatable driveshaft, as in the present invention, comprising: an annular-cylindrical mass member 4 arranged at a radial distance from the driveshaft 1; an elastic supporting element 2 shaped to be positioned on the driveshaft, which is firmly connected to the mass member 4 and extending radially inwardly and which has a first end and a second end; and a single elastic fixing sleeve 3 shaped to be positioned on the driveshaft and at one end connected to the mass member 4, wherein the supporting element 2, in the axial direction, extend along only a portion of the length of the mass member 4, and is arranged with the first end at a first end of the mass member 4 opposite the fixing sleeve 3, and with the second end at an axial distance from a second end of the mass member next to the fixing sleeve. Yokoda's supporting element 2 lacks a plurality of circumferentially spaced elastic support elements. Yokoda shows the first end of the supporting element 2 to be at the first end of the mass member 3 while the claim

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requires a first axial distance from the first end of the mass member. Gallmeyer et al. teach the concept of a plurality of circumferentially spaced elastic support elements 20 for a damper 10 in figure 1 in order to reduce the weight of the damper at the same time providing a customized design for a certain vibration dampening needs to dampen out a certain frequency in column 2, lines 33-41 wherein the support elements 20 have their first ends arranged at a first axial distance from a first end (bottom end in figure 2) of a mass member 12 and their second ends arranged at a second axial distance from a second end (top end) of the mass member 12 with the second axial distance being greater than the first axial distance. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Yokoda's vibration absorber with a plurality of circumferentially spaced elastic support elements for a damper as taught by Gallmeyer in order to reduce the weight of the damper at the same time providing a customized design for a certain vibration dampening needs to dampen out a certain frequency by varying the number of supporting elements and varying the lateral length of the supporting elements as stated in column 2, lines 33-41 of Gallmeyer.

Re: claim 2, figure 1 of Yokoda shows the sleeve 3 as claimed.

Re: claim 3, figure 1 of Yokoda shows the seat face facing the shaft 1 and the collar portion as claimed.

Re: claim 4, figure 1 of Yokoda shows an annular elastic member, coating 5. As modified, the support elements would be connected with one another by the coating 5.

Re: claims 5 and 6, figure 1 of Yokoda shows the supporting member 2, the fixing sleeve 3 and the mass member 4 are integrally connected.

Re: claims 7 and 8, Yokoda states that the mass member is made of metal tubing in the last paragraph on page 7 bridging to page 8.

Re: claims 9 and 10, figure 1 of Yokoda shows the sleeve 3 as claimed.

Re: claims 11 and 12, Yokoda's vibration absorber, as rejected in claim 9, lacks the sleeve portion of a constant thickness and of a thickness that increases from the mass member to the collar portion. These are considered design choices depending on the each application of vibration dampening. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the vibration absorber of Yokoda to include a sleeve portion comprising one of a constant thickness and of a thickness that increases from the mass member to the collar portion in order to satisfy a certain design requirement. This is further evidenced from Applicant's disclosure in paragraph [0013] that the wall thicknesses are obvious alternative designs for the sleeve portion.

Re: claim 13, figure 1 of Yokoda shows a groove to receive clamp band 7.

Re: claims 18 and 19, figure 1 of Gallmeyer shows supporting elements 20 comprise identical cross-sectional shapes and uniformly distributed as claimed.

Re: claim 20, Yokoda shows in the last paragraph on page 7 that the supporting element 2 and sleeve 3 are made of rubber.

3. Claims 22-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada (USP 5,090,668) in view of Gallmeyer et al (USP 5,660,256).

Re: claim 22, Hamada shows in figure 1, a vibration absorber for attaching to a rotatable driveshaft, as in the present invention, comprising: an annular-cylindrical mass member 10 arranged at a radial distance from the driveshaft S; an elastic supporting element 16 shaped to be positioned on the driveshaft, which is firmly connected to the mass member 10 and extending radially inwardly; and a single elastic fixing sleeve 15 shaped to be positioned on the driveshaft and at one end connected to the mass member 10, wherein the supporting element 16, as shown in figure 1, is connected to the mass member axially opposite the fixing sleeve and wherein the supporting element is arranged completely axially outside the length of the mass member 10 as shown in figure 1. Hamada's supporting element 16 lacks a plurality of circumferentially spaced elastic support elements. Gallmeyer et al. teach the concept of a plurality of circumferentially spaced elastic support elements 20 for a damper 10 in figure 1 in order to reduce the weight of the damper at the same time providing a customized design for a certain vibration dampening needs to dampen out a certain frequency in column 2, lines 33-41. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Hamada's vibration absorber with a plurality of circumferentially spaced elastic support elements for a damper as taught by Gallmeyer in order to reduce the weight of the damper at the same time providing a customized design for a certain vibration dampening needs to dampen out a certain frequency in column 2, lines 33-41 of Gallmeyer.

Re: claims 23 and 24, Hamada shows in figure 1 the sleeve portion 13 with a seat face 15a as claimed.

Re: claims 25-27, figure 1 of Hamada shows an annular elastic member connecting the fixing sleeve, the supporting element and the mass member. As modified, the support elements would be connected as claimed.

Re: claims 28 and 29, Hamada states that the mass member is made of metal tubing in column 5, lines 15-20.

Re: claims 30 and 32, figure 1 of Hamada shows the sleeve 13 as claimed.

Re: claims 31 and 33, Hamada's vibration absorber, as rejected in claim 30, lacks the sleeve portion of a thickness that decreases and a thickness that increases from the mass member to the collar portion. These are considered design choices depending on the each application of vibration dampening. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the vibration absorber of Hamada to include a sleeve portion comprising one of a thickness that decreases and a thickness that increases from the mass member to the collar portion in order to satisfy a certain design requirement. This is further evidenced from Applicant's disclosure in paragraph [0013] that the wall thicknesses are obvious alternative designs for the sleeve portion.

Re: claim 34, figure 1 of Hamada shows a groove 15a to receive clamp band 15b.

Re: claims 35 and 36, figure 1 of Gallmeyer shows supporting elements 20 comprise identical cross-sectional shapes and uniformly distributed as claimed.

Re: claim 37, Hamada shows in column 5, lines 20-25 that the supporting element 16 and sleeve 13 are made of rubber.

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4. Claims 40-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honma (JP 403037450A) in view of Gallmeyer et al (USP 5,660,256).

Re: claim 40, Honma shows in figure 1, a vibration absorber for attaching to a rotatable driveshaft 1, as in the present invention, comprising: an annular-cylindrical mass member 3 arranged at a radial distance from the driveshaft 1; an elastic supporting element 2 shaped to be positioned on the driveshaft, which is firmly connected to the mass member 3 and extending radially inwardly; and a single elastic fixing sleeve 4 shaped to be positioned on the driveshaft and at one end connected to the mass member 3, wherein the supporting element 2, as shown in figure 1, is connected to the mass member axially opposite the fixing sleeve and wherein the supporting element is arranged partially axially inside and partially axially outside the length of the mass member 3 as shown in figure 1. Honma's supporting element 2 lacks a plurality of circumferentially spaced elastic support elements. Gallmeyer et al. teach the concept of a plurality of circumferentially spaced elastic support elements 20 for a damper 10 in figure 1 in order to reduce the weight of the damper at the same time providing a customized design for a certain vibration dampening needs to dampen out a certain frequency in column 2, lines 33-41. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Honma's vibration absorber with a plurality of circumferentially spaced elastic support elements for a damper as taught by Gallmeyer in order to reduce the weight of the damper at the same time providing a customized design for a certain vibration dampening needs to dampen out a certain frequency in column 2, lines 33-41 of Gallmeyer.



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Re: claims 42 and 43, Honma shows in figure 1 the sleeve portion with a seat face as claimed.

Re: claims 44-46, figure 1 of Honma shows an annular elastic member connecting the fixing sleeve, the supporting element and the mass member. As modified, the support elements would be connected as claimed.

Re: claims 47-48, Honma states that the mass member is made of metal in Abstract.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoda (JP 2-221731) in view of Gallmeyer et al (USP 5,660,256) and further in view of Kogyo (JP- 08177976 A).

Yokoda's vibration absorber, as rejected in claim 1, lacks the openings formed in the sleeve portion. Kogyo teaches a concept of having openings in the sleeve portion 3(3a) as shown in figures 1 and 2 in order to provide a wide range of dampening. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Yokoda's absorber with openings in the sleeve portion as taught by Kogyo in order to further providing a wider range of dampening as taught by Kogyo in the Abstract.

6. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada (USP 5,090,668) in view of Gallmeyer et al (USP 5,660,256) and further in view of Kurosu et al. (USP 6,485,370).

Hamada's vibration absorber, as rejected in claim 22, lacks the openings formed in the sleeve portion. Kurosu teaches a concept of having openings 8a in the sleeve 8

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as shown in figures 4a and 4b in order to provide ease of fitting the absorber on to a shaft. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Hamada's absorber with openings in the sleeve portion as taught by Kurosu in order to provide ease of fitting the absorber on to a shaft.

7. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honma (JP 403037450A) in view of Gallmeyer et al (USP 5,660,256) and further in view of Kurosu et al. (USP 6,485,370).

Honma's vibration absorber, as rejected in claim 41, lacks the openings formed in the sleeve portion. Kurosu teaches a concept of having openings 8a in the sleeve 8 as shown in figures 4a and 4b in order to provide ease of fitting the absorber on to a shaft. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Hamada's absorber with openings in the sleeve portion as taught by Kurosu in order to provide ease of fitting the absorber on to a shaft.

### ***Response to Arguments***

8. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

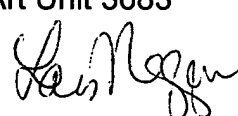
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is (571) 272-7121. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on (571) 272-6786. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lan Nguyen  
Primary Examiner  
Art Unit 3683

 4/28/06